

I'm Sensitive,
I'm Impressive,
I'm Elite

—
DECADE Elite – Electrochemical detector



- ☑ *Most sensitive electrochemical detector*
- ☑ *Temperature stabilized cell compartment*
- ☑ *ADF to improve S/N ratio*
- ☑ *Wide selection of flow cells*

World: Antec Headquarters, www.myantec.com

USA: Antec LLC, www.antec-hplc.com



Ultra High Performance Liquid Chromatography

The DECADE Elite has been developed to meet the demands in ultra fast analysis, as to detection sensitivity, acquisition frequency and temperature specifications.

SenCell – High Sensitivity Wall Jet Flow Cell

- ✓ **Highest sensitivity**
- ✓ **Adjustable volume/spacing**
- ✓ **Fast stabilization**
- ✓ **5 years warranty**

The SenCell is a new generation electrochemical flow cell specifically designed for highest sensitivity. The tool free assembly and the continuously adjustable working volume guarantees ease of use and excellent performance. The volume of the flow cell can be adjusted between 0 and 300 nL.

Without stability no sensitivity!

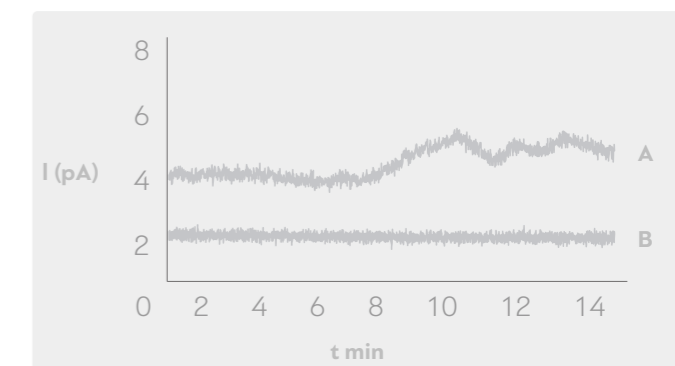
The famous Antec workstation concept is used to stabilize the baseline and keep column and flow cell (separation and detection) at a very accurate stable temperature.

ADF (advanced digital filtering)

To achieve unprecedented sensitivity in UHPLC/ECD the detector is equipped with a unique ADF filter to assure the lowest noise level.

Integrated temperature control

Baseline without temperature control (A) and baseline of DECADE Elite with temperature control (B). Separation and detection in one compartment.



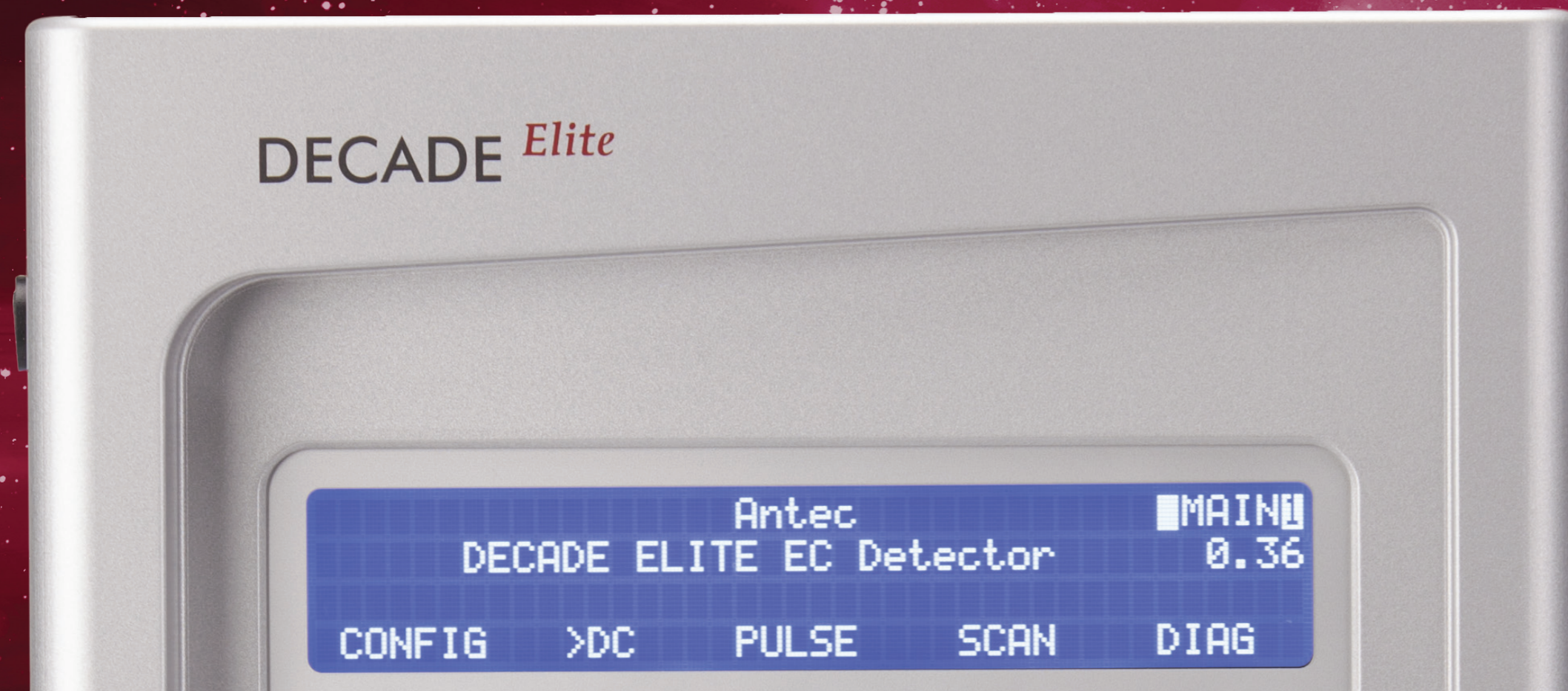
Control up to 4 cells

The DECADE Elite is able to control up to 4 cells in parallel or serial configuration for e.g. electrochemical derivatization or pre-reduction (vit-K, Q10 etc).

The detector has a pulse mode for carbohydrate analysis using the traditional 3-step pulse and more advanced 4 or 5 step pulse. Software drivers for Clarity and other packages are available as well as multiple analogue outputs for 3rd party acquisition software.

Antec provides a range of amperometric flow cells with different configurations to optimize your application. The flow cells are QC tested, certified and warranted for a period of (up to) 5 years.

For all our cells we provide a QC certified refurbishing service.



General specifications

Power	100-240 VAC, 50/60 Hz, 260 VA max., auto-sensing
Operation modes	DC, Pulse and Scan mode
Potential range	± 2.50 V, 10 mV increments
Output (DAC)	± 1 V (16-bit D/A converter)
Output (I/E)	± 2.5 V (unprocessed analog signal)
Auto zero	triggered by keyboard, rear panel TTL, or control software
LAN	instrument control, data acquisition (USB service port)
Oven	from +7°C above ambient to 60°C, accuracy 0.5°C, stability 0.1°C; accommodates column and flow cell(s)
Regulatory	CE, cMETus approved, RoHS compliant
Rear panel I/O	1x IEC inlet (Mains), 1x USB B, 1x RJ45 LAN, 1x 9-pins sub-d D Male (Valve), 1x 9-pins sub-d Female (Analog output), 1x 25-pins sub-d Female (Digital I/O)
Filter	Advanced digital filter (10 - 0.001 Hz in 1, 2, 5 increments)

DC mode

Range	10 pA - 200 μ A in 1, 2, 5 increments
Data Rate	1 - 100 Hz in 1, 2, 5 increments (actual data rate dependent on filter setting)
Noise	≤ 2 pA with dummy cell (load of 300 M Ω /0.5 μ F), range 1 nA/V, filter off, E _c +800mV and temperature of 35 °C.

Pulse mode

Range	10 nA - 200 μ A in 1, 2, 5 increments
Waveform	5-step potential pulse (max)
Data Rate	1/(pulse duration) Hz
Pulse times	t ₁ : 100 ms - 2000 ms; t ₂ , t ₃ , t ₄ , t ₅ : 0 - 2000 ms in 10 ms increments
Sampling times	t _s : 20 ms to (t ₁ - 60 ms)

Scan rate

Range	10 nA - 200 μ A in 1, 2, 5 increments
Data Rate	1 Hz
Scan rate	1 - 100 mV/s in 1, 2, 5 increments, cycle: half, full or continuous

Physical specifications

Dimensions	43 (D) x 22 (W) x 44 (H) cm = 16.9" (D) x 8.7" (W) x 17.3" (H)
Weight	max 14.4 kg (32 lbs) without flow cell and column

Antec – proven performance

For over 25 years Antec has been the world's leading supplier of ultra-sensitive electrochemical detectors, and reactors for Electrochemistry (EC) upfront MS detection.

